

What is claimed is:

1. A process for fabricating a photonics package comprising:
positioning a photodetector in a housing;
inserting an optical fiber through a flange into the housing;
securing the optical fiber to the flange; and
securing the flange to the housing.
2. The process of claim 1, further including;
adjusting the position of the flange on the housing while securing the
flange to position the optical fiber with respect to the photodetector.
3. The process of claim 1, wherein securing the flange to the housing
includes affixing the flange by a settable sealing material.
4. The process of claim 3, further including:
adjusting the position of the flange in the housing while securing the flange
to position the optical fiber with respect to the photodiode.
5. The process of claim 1, further including:
longitudinally adjusting the location of the optical fiber within the flange to
adjust the spacing between the optical fiber and the photodiode prior to securing
the optical fiber to the flange.
6. The process of claim 5, further including:
laterally adjusting the position of the flange on the housing to align the
optical fiber with the photodiode prior to securing the flange.
7. The process of claim 6, wherein securing the flange to the housing
includes affixing the flange by a settable sealing material.

8. The process of claim 7, further including additionally laterally adjusting the position of the flange on the housing during setting of the settable sealing material.

9. The process of claim 8, further including securing a ferrule to the optical fiber by staking a first end of the ferrule to an optical fiber jacket, and hermetically sealing a second end of the ferrule to the optical fiber.

10. The process of claim 8, wherein securing the optical fiber to the flange includes ring welding.

11. The process of claim 1, further including securing a ferrule to the optical fiber by staking a first end of the ferrule to an optical fiber jacket and hermetically sealing a second end of the ferrule to a distal end of the optical fiber, said ferrule enclosing the portion of the optical fiber which is inserted through said flange.

12. The process of claim 11, further including hermetically sealing said housing.

13. A process for fabricating an optical fiber assembly for a photonics package comprising:

securing a cylindrical, elongated ferrule coaxially around a jacketed optical fiber;

exposing the distal end of the fiber;

adjustably positioning the ferrule coaxially within a cylindrical flange; and

securing the ferrule within the flange.

14. A photonics package including:

a housing including spaced front and back walls;

a photosensitive element mounted on said back wall within the housing;

a fiber adjustment window through said front wall opposite said photosensitive element;

a fiber optic assembly including an optical fiber and a cylindrical flange receiving said optical fiber, said flange being laterally adjustable and secured to said front wall to locate said optical fiber in said fiber adjustment window and to align an end portion of said optical fiber with said photosensitive element.

15. The photonics package of claim 14 wherein said flange is adjustably secured to said front wall by a settable material to allow alignment of said optical fiber while said material is setting.

16. The photonics package of claim 15, wherein said settable material is solder.

17. The photonics package of claim 16, wherein said fiber optic assembly further includes a ferrule coaxial with and surrounding said optical fiber, said ferrule being secured to said cylindrical flange to position said optical fiber longitudinally with respect to said photosensitive element.